

REMARKS

Applicant has cancelled claims 6, 12, 17, 26, and 29-39.

Applicant acknowledges that the prior objection to the drawings has been withdrawn.

Applicant acknowledges that the prior objection to the specification has been withdrawn.

The Office Action objects to claims 1, 13, and 23 as containing language as to the plurality of sets of facets in the dome-shaped crown having an equal number of facets in each set. Applicant has deleted the language in question.

Applicant cannot identify "the crown" in claim 3. However, Applicant has endeavored to clarify antecedence for "the crown" in all claims.

The Office Action rejects claims 1, 5, 13-14, 17, 23-24, and 26 under 35 U.S.C. 102(b) as being anticipated by Stafford (US patent D370642). Applicant has amended claims 1, 13, and 23 to more clearly distinguish over the prior art of record.

Amended claim 1 recites a diamond comprising a pavilion having a plurality of facets disposed from a girdle to a culet. Each of the plurality of facets has a continuous flat surface extending from the girdle to the culet. An edge of a first adjoining facet contacts an edge of a second adjoining facet along a common radial boundary. A dome-shaped crown is disposed above the girdle. The girdle extends no further than a widest circumference of the dome-shaped crown and the pavilion extends no further than a widest circumference of the girdle. The dome-shaped crown is formed from at least ten sets of facets cut with monotonically decreasing angles to form a curved contour in accordance with a dome shape from the girdle to an apex of the

dome-shaped crown. Each of the sets of facets has a monotonically decreasing surface area from the girdle to the apex of the dome-shaped crown. The apex of the dome-shaped crown is star-shaped with a plurality of points conforming to a top-most set of facets.

The Stafford reference does not teach or suggest a dome-shaped crown formed from at least ten sets of facets cut with monotonically decreasing angles to form a curved contour in accordance with a dome shape from the girdle to an apex of the dome-shaped crown. Applicant disagrees with the assessment that the Stafford cut is dome-shaped. But certainly it can be agreed that Stafford does not have at least ten sets of facets cut to a curved contour, see paragraph 29 of the specification. Stafford shows at most two sets of facets beyond the girdle. Claim 1 requires at least ten rows of facets to achieve the curved contour in accordance with the dome-shape. The curved contour of the dome-shape provides a larger overall crown area, more facets, and more angles, which allows more light to be received and reflected by the diamond to create greater brilliance and scintillation, see paragraph 36 of the specification.

Moreover, the Stafford reference does not teach or suggest an apex of the dome-shaped crown being star-shaped with a plurality of points conforming to a top-most set of facets. The Stafford cut is commonly known as a table-top, which is certainly not star-shaped. The star-shaped apex, in combination with the dome-shaped crown, creates a much smaller center facet in lieu of the large table-top cut found in Stafford. The star-shaped apex with a plurality of points conforming to a top-most set of facets allows the diamond to have its dome-shape and curved contour, which creates more facets and angles to reflect light, see

paragraph 36 of the specification. Stafford does not show this feature.

Claim 1 is believed to patentably distinguish over the Stafford reference. Claims 3-5, 7-8, and 10 are believed to be in condition for allowance as each is dependent from an allowable base claim.

As for claim 13, the claim is amended to recite a cut gemstone comprising a pavilion extending from a girdle to a culet. The girdle extends no further than a widest circumference of the crown and the pavilion extends no further than a widest circumference of the girdle. A crown in the form of a symmetrical hemisphere is formed from at least ten sets of facets between the girdle and an apex of the crown including a first set of facets disposed above the girdle and a second set of facets disposed between the first set of facets and an apex of the crown. The first set of facets is cut at a first angle with respect to a reference line which is tangential to the apex of the crown and the second set of facets is cut at a second angle with respect to the reference line which is less than the first angle.

The Stafford reference does not teach or suggest a crown in the form of a symmetrical hemisphere. Applicant submits that one of ordinary skill in the art would not label the Stafford cut as a hemisphere. Nonetheless, Stafford certainly does not show at least ten sets of facets between the girdle and an apex of the crown.

Claim 13 is believed to patentably distinguish over the Stafford reference. Claims 14-16, 18-19, and 21 are believed to be in condition for allowance as each is dependent from an allowable base claim.

As for claim 23, the amended claim recites a cut gemstone comprising a pavilion having a plurality of facets disposed from a girdle to a culet. A dome-shaped crown is disposed above the girdle. The girdle extends no further than a widest circumference of the dome-shaped crown and the pavilion extends no further than a widest circumference of the girdle. The dome-shaped crown is formed from at least ten sets of facets cut with monotonically decreasing angles to form a curved contour in accordance with a dome shape from the girdle to an apex of the dome-shaped crown.

For similar reasons given for claim 1, the Stafford reference does not teach or suggest a dome-shaped crown formed from at least ten sets of facets cut with monotonically decreasing angles to form a curved contour in accordance with a dome shape from the girdle to an apex of the dome-shaped crown. Stafford does not have at least ten rows of facets in its crown. The Stafford cut is not a curved contour in accordance with a dome shape.

Claim 23 is believed to patentably distinguish over the Stafford reference. Claims 24-25 and 27-28 are believed to be in condition for allowance as each is dependent from an allowable base claim.

The Office Action rejects claims 3-4, 15-16, and 25 under 35 U.S.C. 103(a) as being unpatentable over Stafford. The 103 rejection is considered moot. These dependent claims are believed to be in condition for allowance in view of the amendments to the respective base claims.

The Office Action rejects claims 7, 8, 18-19, 20, 27-28, and 30 under 35 U.S.C. 103(a) as being unpatentable over Stafford in view of Almaraz (US patent D443244). Applicant

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objects to the Almaraz reference as being completely unrelated and nonanalogous prior art. Applicant submits that one of skill in the art of diamond cutting would not look to hubcaps for design ideas. Nonetheless, claim 30 has been cancelled and otherwise the 103 rejection is considered moot. These dependent claims are believed to be in condition for allowance in view of the amendments to the respective base claims.

Applicant(s) believe that all information and requirements for the application have been provided to the USPTO. If there are matters that can be discussed by telephone to further the prosecution of the Application, Applicant(s) invite the Examiner to call the undersigned attorney at the Examiner's convenience.

The Commissioner is hereby authorized to charge any fees due with this Response to U.S. PTO Account No. 17-0055.

Respectfully submitted,
QUARLES & BRADY STREICH LANG LLP

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By: 

Robert D. Atkins
Reg. No. 34,288

Address all correspondence to:
Robert D. Atkins
Quarles & Brady Streich Lang LLP
One Renaissance Square
Two North Central Avenue
Phoenix, AZ 85004
Telephone: (602) 229-5311
Facsimile: (602) 229-5690
Email: rda@quarles.com